

Client's ref.:A03004
File: 0535-9769US/final/ChenTF Kevin

What is claimed is:

- 1 1. A disc drive, comprising:
 - 2 a tray;
 - 3 a bracket connected to the tray;
 - 4 a lever pivotally connected to the bracket;
 - 5 a latching member pivotally connected to the lever
 - 6 and having a first protrusive portion, the
 - 7 latching member being rotated in a first
 - 8 direction independently but accompanied by the
 - 9 lever when rotating in a second direction;
 - 10 a solenoid connected to the bracket and movably
 - 11 connected to the lever;
 - 12 a stopper engaged with the latching member to lock
 - 13 the tray;
 - 14 a rail having a second protrusive portion,
 - 15 wherein the lever is forced to rotate the latching
 - 16 member in the first direction, the latching
 - 17 member is disengaged from the stopper to eject
 - 18 the tray, and then the first protrusive portion
 - 19 of the latching member is pressed by the second
 - 20 protrusive portion of the rail so as to rotate
 - 21 the latching member in the second direction and
 - 22 move the latching member and the lever back.
- 1 2. The disc drive as claimed in claim 1 further
 - 2 comprising a torsion spring mounted on the lever, wherein
 - 3 one end of the torsion spring abuts the latching member
 - 4 to move the latching member back after the latching
 - 5 member rotates in the first direction.

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1 3. The disc drive as claimed in claim 2, wherein
2 the latching member rotates in the first direction to
3 disengage from the stopper for releasing the tray, the
4 lever is not moved with the latching member.

1 4. The disc drive as claimed in claim 2, wherein
2 the latching member rotates in the second direction
3 because of the torsion spring, the second protrusive
4 portion presses the first protrusive portion so as to
5 move the lever and the latching member back.

1 5. The disc drive as claimed in claim 1 further
2 comprising a compression spring fixed to the lever in one
3 end and contacted the tray in the other end, the lever is
4 pressed by the compression spring as the lever is
5 disconnected with the solenoid, and the lever rotates the
6 latching member so as to disconnect the latching member
7 and the stopper.

1 6. The disc drive as claimed in claim 1, wherein
2 the rail has a concave portion adjacent to the second
3 protrusive portion such that the first protrusive portion
4 is moved along the concave portion and then pressed
5 against the second protrusive portion to move the
6 latching member and the lever back.

1 7. The disc drive as claimed in claim 1, wherein
2 the lever and the latching member are pivotally connected
3 on the bracket by a fastener.